



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,955	06/15/2006	Hideji Wakabayashi	292584US2PCT	1483

22850 7590 03/19/2009
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

CHAKOUR, ISSAM

ART UNIT	PAPER NUMBER
----------	--------------

2617

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

03/19/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/582,955	Applicant(s) WAKABAYASHI, HIDEJI	
	Examiner ISSAM CHAKOUR	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/15/2006;01/03/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 11, 13, 14, 16, 17, 19, 20, and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (Kim, USPPA 2003/0119452) in view of Vadgama (USPPA 2003/0083069).

4. Consider claims 11, 14, 17, 20, 23, and 25, Kim discloses a communications method, mobile station, and its corresponding system relating to a multimedia broadcast multicast service (MBMS) of multicasting or broadcasting a multimedia data to a plurality of mobile stations in a communications system (See [0011]), said communications method comprising:

a service information transmitting step of transmitting service information indicating a state of an MBMS service in each of the given cells (See [0299], lines 5-8 and [0143],

Art Unit: 2617

lines 4-8);

a service information receiving step of receiving the service information transmitted in said service information transmitting step (See [0076], lines 9-11 and [0078] lines 7-10); and

a cell selecting step of acquiring a set including a plurality of cells from which a mobile station can receive an MBMS on the basis of the information about said power ratio which is received in said power ratio receiving step, and said service information received in said service information receiving step (See [0076] lines 4-9).

Kim does not teach explicitly a power ratio transmitting step of transmitting information about a power ratio between a power of a common control physical channel used for multicasting or broadcasting said multimedia data in each of given cells and a power of a common pilot channel used for transmitting an information on reference of timing in each of the given cells;

a power ratio information receiving step of receiving the information about the power ratio transmitted in said power ratio transmitting step;

However, Vadgama discloses a power ratio transmitting step of transmitting information about a power ratio between a power of a common control physical channel used for multicasting or broadcasting said multimedia data in each of given cells (See [0105] lines 2-6, note that control channel can be used in the ratio as disclosed by Vadgama in lines 7-8 of [0105]) and a power of a common pilot channel used for transmitting an information on reference of timing in each of the given cells (See [0021] lines 5-7) ; a power ratio information receiving step of receiving the information about the power

Art Unit: 2617

ratio transmitted in said power ratio transmitting step (the step is inherent in Vadgama's invention as the transmission of power ratio information entails correspondingly the reception element);

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute in Kim's invention the feature of estimating channel quality information with the power ratio information as taught by Vadgama in order to assure proper cell selection based on best available MBMS service corresponding to a satisfactory power ratio.

5. Regarding claims 13, 16, 19, 22, 24 and 26, Kim in view of Vadgama discloses the communications method, the mobile station, and its corresponding system according to Claims 11, 14, 17, 20, 23, and 25 respectively, Kim in view of Vadgama as mentioned above teaches receiving power ratio information of plurality of cells in said receiving step as well as power of common pilot channel (for pilot measurement see [0099] line 12). Kim does not teach explicitly a ranking step of the plurality of cells on the basis of the information about said power ratio of the cells. Nonetheless, Vadgama discloses such feature wherein a ranking step of ranking or prioritizing the plurality of cells on the basis of the information about said power ratio of the given cells (See [0029] lines 1-8, note that although Vadgam teaches that it may be decided to rank based on signal quality, power ratio as disclosed by Vadgam in [0105] lines 2-6, is analogous to said criterion of signal quality) the plurality of cells included in said set are determined on the basis of the

Art Unit: 2617

ranking determined in said ranking step and predetermined threshold (See [0077], lines 5-7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the additional limitations taught by Vadgama in Kim's invention in order to determine the cells having sufficient signal quality of the MBMS service and by selective combining of cells reduce the overall power requirements on particular serving cells.

6. Claims 12, 15, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Vadgama as applied to claim 1 above, and further in view of the applicant provided non-patent literature (Source: NTT DoCoMo, "Selective Combining for MBMS", October, 6th 2003).

7. Consider claims 12, 15, 18 and 21, Kim in view of Vadgama discloses the communications method, the mobile station, and its corresponding system according to Claims 11, 14, 17 and 20 respectively, further comprising:

a decoding step of receiving a signal transmitted using said common control physical channel in each of the plurality of cells included in the set acquired in said cell selecting step, and decoding said signal to acquire a plurality of decoded signals (See [0191], lines 19-20, note that the decoder carries the steps of receiving the common control channel, see [0078], lines 9-10);

Kim in view of Vadgama does not explicitly teach a selectively-combining step of selecting a signal from the plurality of decoded signals acquired in said decoding step and thereby obtaining an output signal.

Art Unit: 2617

However, applicant provided reference suggests a method in which a selectively-combining step of selecting a signal from the plurality of decoded signals acquired in said decoding step and thereby obtaining an output signal. It would have been obvious to one of ordinary skill in the art to add the limitation as taught by the provided reference in Kim's invention in view of Vadgama because it would mitigate power consuming extended MBMS service on selected cells that have service overload thereby reducing power requirements on said cells.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Seo et al (USPPA 2003/0232622), Kwak et al (USPPA 2003/0088695), Cai et al (USPPA 2004/0229572), Kim et al (USPPA 2004/0087320), Holtzman et al (US Patent 6,760,587), and Black et al (US Patent 6,594,501).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISSAM CHAKOUR whose telephone number is (571) 270-5889. The examiner can normally be reached on Monday-Thursday (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Perez Rafael can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2617

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/I. C./

Examiner, Art Unit 2617

/Rafael Pérez-Gutiérrez/

Supervisory Patent Examiner, Art Unit 2617